THE TRANSIT OF VENUS.

On Tuesday evening, Mr. William Huggins, F.R.S., lectured at the Royal Institution, Hull, on "The Transit of Venus." Dr. King occupied the chair, and there was a large audience. The lecturer observed that a transit of Venus possessed no element of grandeur; but many well-equipped expeditions, occupying some 75 stations, would next week observe the transit for the sake of an indirect result, to be worked out afterwards by a process of calculation, to ascertain the sun's distance from the earth. It was sought to obtain the observation by parallax observations in different parts of the earth. Australia, Egypt, Japan, Mauritius, Rodriguez Island, Kerguelen's Island, &c.; and the observing parties were English, American, German, and others. He then proceeded to explain how the sun was formerly supposed to be 95,000,000 of miles from the earth, but how, by more recent observations, astronomers had fixed the distance as between 91,240,000 and 92,100,000 miles. The recent results had been obtained by observations of the movements of other planets, and calculations on known distances and the velocity of light. It was sought, however, to obtain a calculation from the coming transit of Venus; and he explained the great care taken, and the consideration shown, with a view to the observations leading to a correct estimate. It was difficult, on account of the earth's area being so largely taken up by water, to have stations so far north or south as desirable, and then there was the uncertainty of fine weather in parts of the globe where in one case it was winter and the other summer. Arrangements had, however, been made for observations at different places, so as to note accurately the stages of transit, and care taken to obtain the correct longitude of different stations, a necessary basis for the calculations to be obtained by comparison. Mr. Huggins then remarked that the observations to be taken were with the eye, photography, and the spectroscope, and how machinery had been prepared to overcome difficulties which at first presented themselves, and to secure the correctness in all details so highly necessary. The lecture was illustrated by views, shown with the aid of limelight.